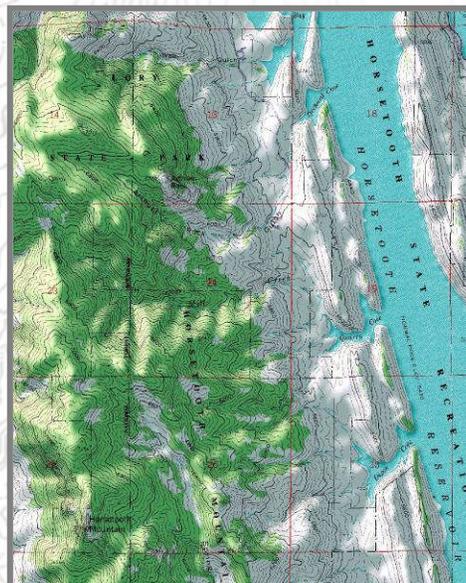
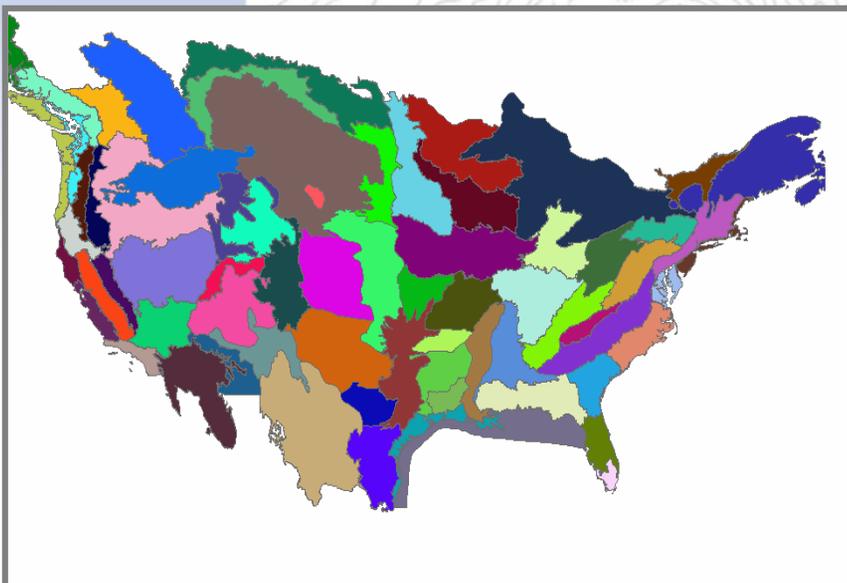
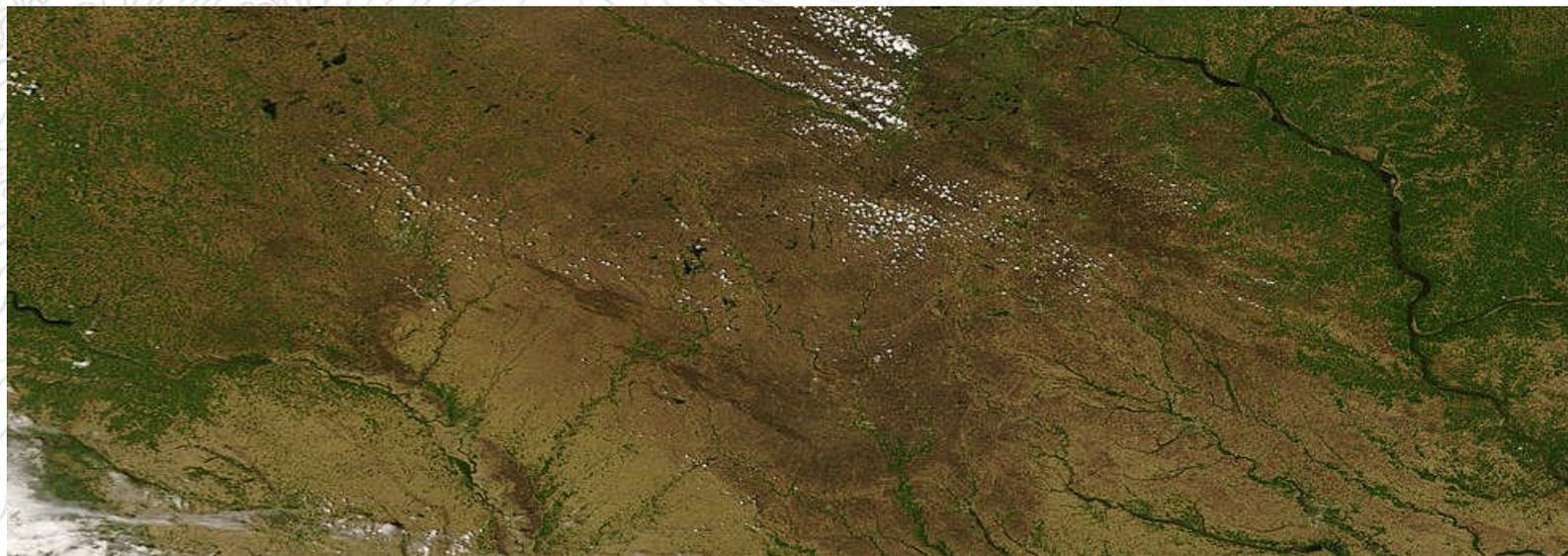




i-cubed

i-cubed : information integration & imaging LLC Geospatial Content Sharing Platform from the USDA FAS using the DataDoors™ Framework





i-cubed

Overview

- Goal of FAS is to share imagery with participating partners – across agencies
- Make discovery easy
 - Web app
 - ArcMap extension
- Make delivery easy
 - Subset
 - Process on Demand
 - Reformat and Reproject
- Improve utilization and thus ROI



i-cubed

DataDoors™

- Authenticated Content Discovery
 - Existing archives
 - New content from commercial vendors
- Delivery as Files
 - GeoTiff, geoPDF, NITF, NUI etc.
 - Optimized processing for user applications
- Delivery as Streams
 - WMS, GE, ESRI etc.
- Integration into enterprise systems
- COTS or Hosted Implementations



i-cubed

Select Customer List

- USFS, USDA...
- U.S. Army TEC, other DOD...
- MapQuest, Yahoo ...
- Tele Atlas, Navico...
- ESRI
- Digital Globe, SPOT, etc...
- Anadarko, Marathon, IHS...
- Nokia, Nextel, Motorola...
- Weather Central, National Geographic...
- OAS, United Nations, ...



i-cubed

The i-cubed Approach

- Adopted 'process engineering' approach
- Hosting and dissemination of imagery
- Enforces
 - Standardization
 - Change Management Protocols
 - Structured approach to use of data assets
 - Corporate business rules
- Enables
 - Focus on respective core businesses
 - Fast flexible responsiveness



i-cubed

The i-cubed Approach

- Facilitates:
 - Enterprise-wide use (all users have access to data, not just the guy with the CD in his desk)
 - Common operating picture
 - De-duplication of imagery data sets
 - Knowledge of what source material was used for production of what products
 - Traceability



i-cubed

Case Study: US Army

- Purchased DataDoors in 2003
- Asked i-cubed to take care of ingest, hosting and streaming services
- Current ingest of over 23,000 individual pieces of media
 - Tape
 - CD
 - DVD
 - USB Drive
- i-cubed is image hosting and streaming solution for non-classified raster data



i-cubed

Genesis

- Manage i-cubed's own data assets
- Manage automated processing of standard data products
- Provide portal for customers to discover and extract their in-house and external data sources
- Commercialized as product in 2003
- Evolved to become End-To-End ASP hosting architecture
- COTS for use behind firewall



i-cubed

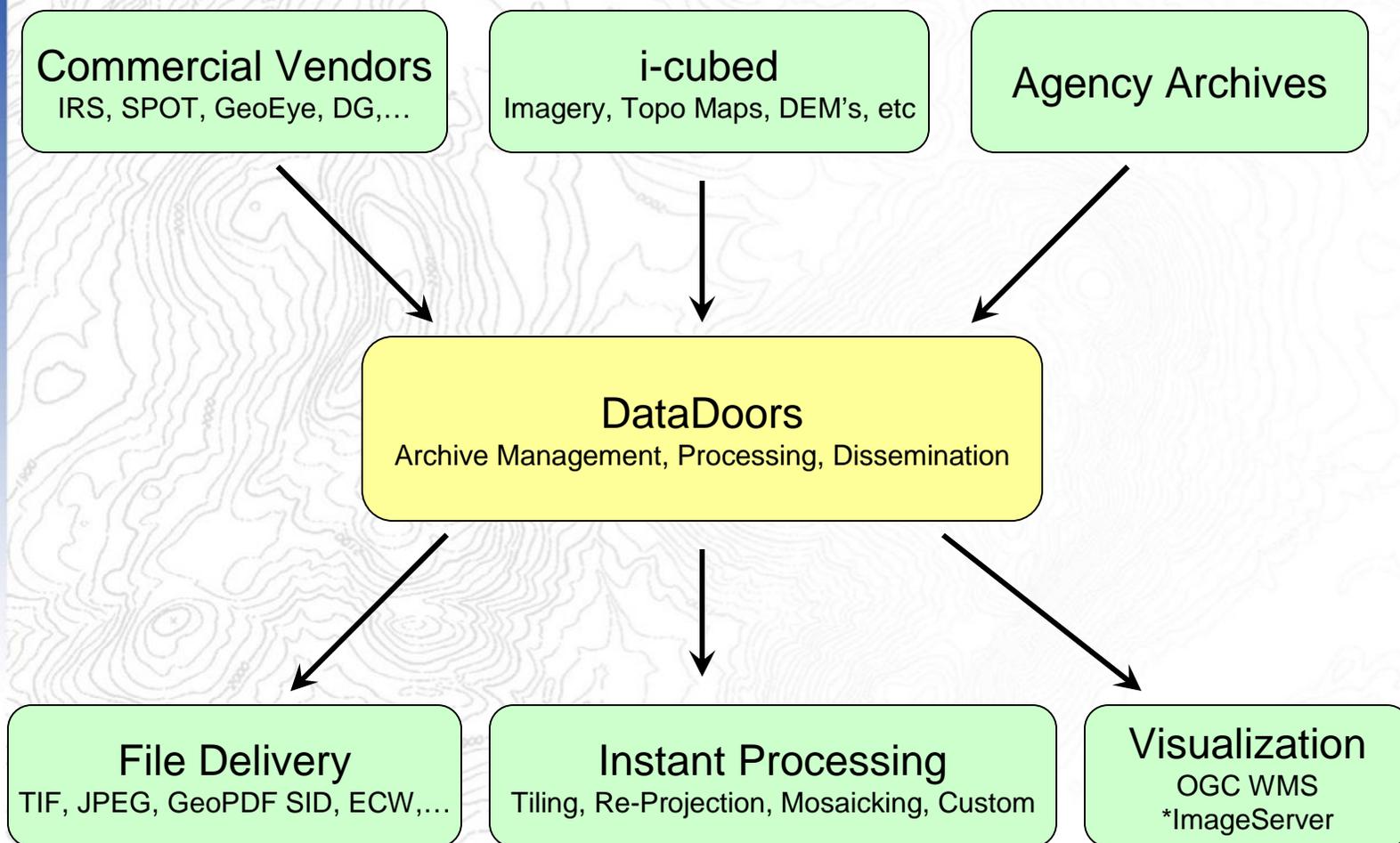
Only Seconds to Utilize Data

- View immediately in stream
- View immediately in 3-d application
- View data processed on the fly or have file delivered
 - Identify your area of interest
 - Choose a product
 - Select a process (optional)
 - Specify output parameters
 - Get your data!



i-cubed

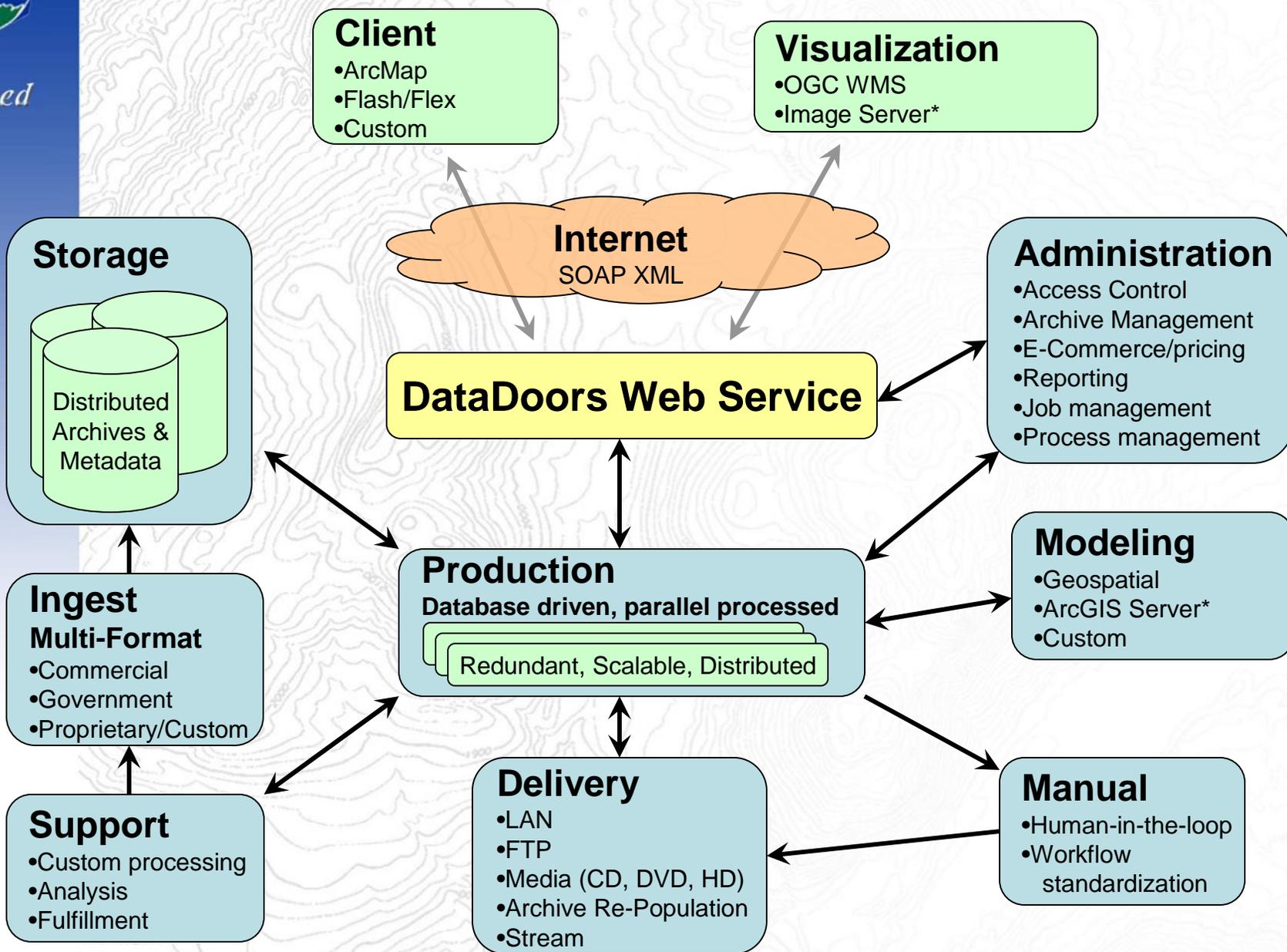
Architectural Overview





i-cubed

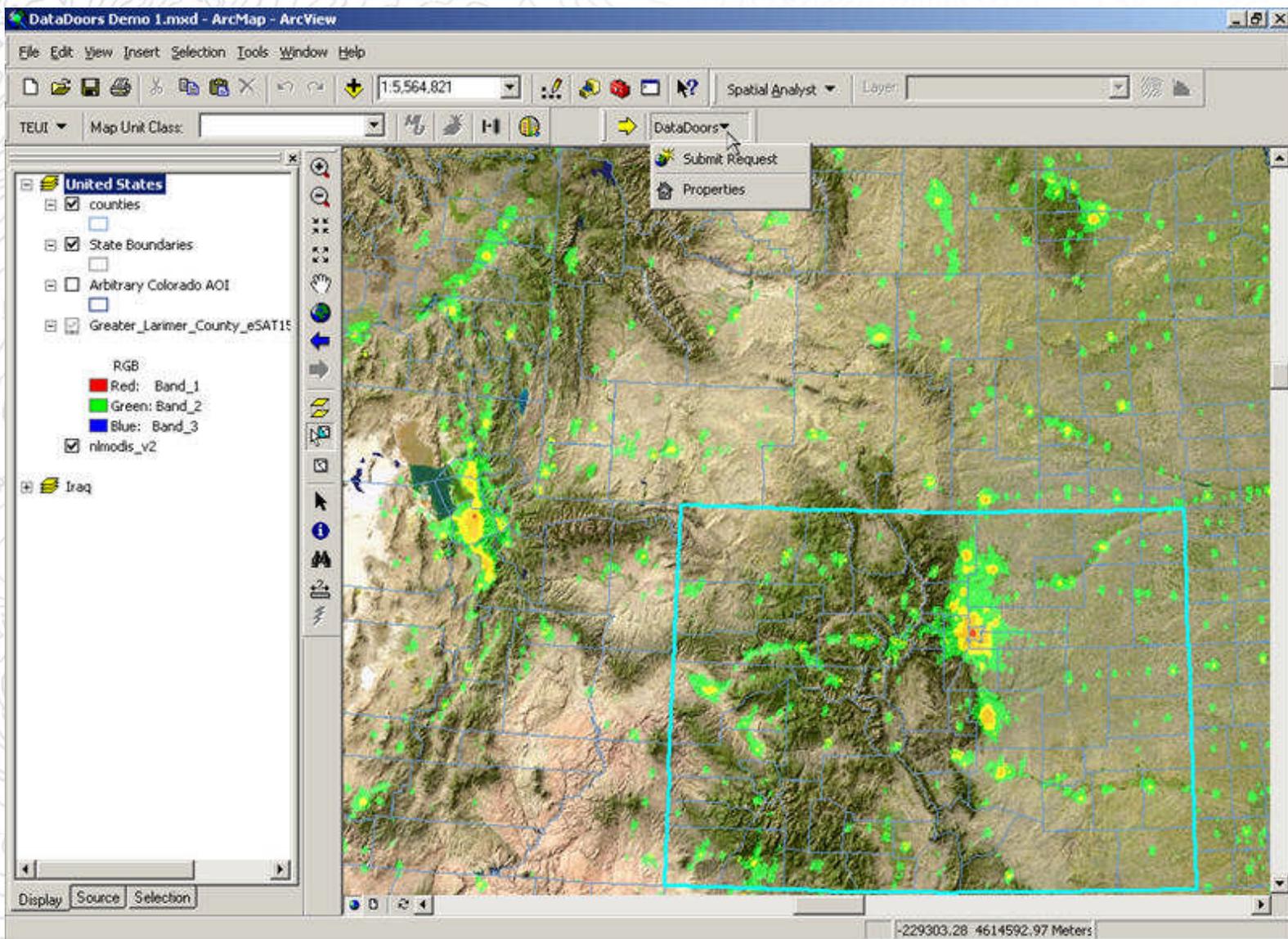
DataDoors Architectural Framework





i-cubed

DataDoors™ for ArcMap™





i-cubed

Secure Access Control

The screenshot shows a GIS application interface. In the foreground, a 'DataDoors Login' dialog box is open. The dialog box has a title bar and contains the following elements:

- Text: 'Welcome to DataDoors for ArcGIS! Please login.'
- Logo: The 'i-cubed' logo.
- User Login: A dropdown menu with 'rcowart@i3.com' selected.
- Password: A text field with masked characters (XXXXXXXXXX).
- Buttons: 'OK' and 'Close' buttons.

The background is a weather radar map of a region, likely the central United States, showing precipitation intensity with a color scale from green to yellow to red. A cyan rectangular box highlights a specific area on the map. The entire scene is overlaid on a topographic map background.



i-cubed

Select Data Source (Product)

DataDoors - Submit Request Wizard - Product

Choose the Product you wish to request.

Products

- i-cubed
 - Maps
 - Terrain
 - Imagery
 - eDOQQ 8-meter mosaic
 - eSAT15, Eco-Region Stretch
 - eSAT15, Nationwide Stretch
 - eSAT15, Unstretched
 - Global MODIS Mosaic

Description

Enhanced Digital Ortho Quarter Quad Mosaic, 8-meter resolution (coverage where available, updates quarterly)

Help Cancel < Back Next > Submit



i-cubed

Place Order!

DataDoors - Submit Request Wizard - Submit Data Request

Please review the data request. If there are any modifications that are required step back to the appropriate page to make the changes.
Click Submit to submit data request and complete process.

Request Summary

Request Summary: 2/24/2005 2:00:37 PM

Requester: Russ Cowart - I-cubed
Total Product and Media Cost: \$2.00

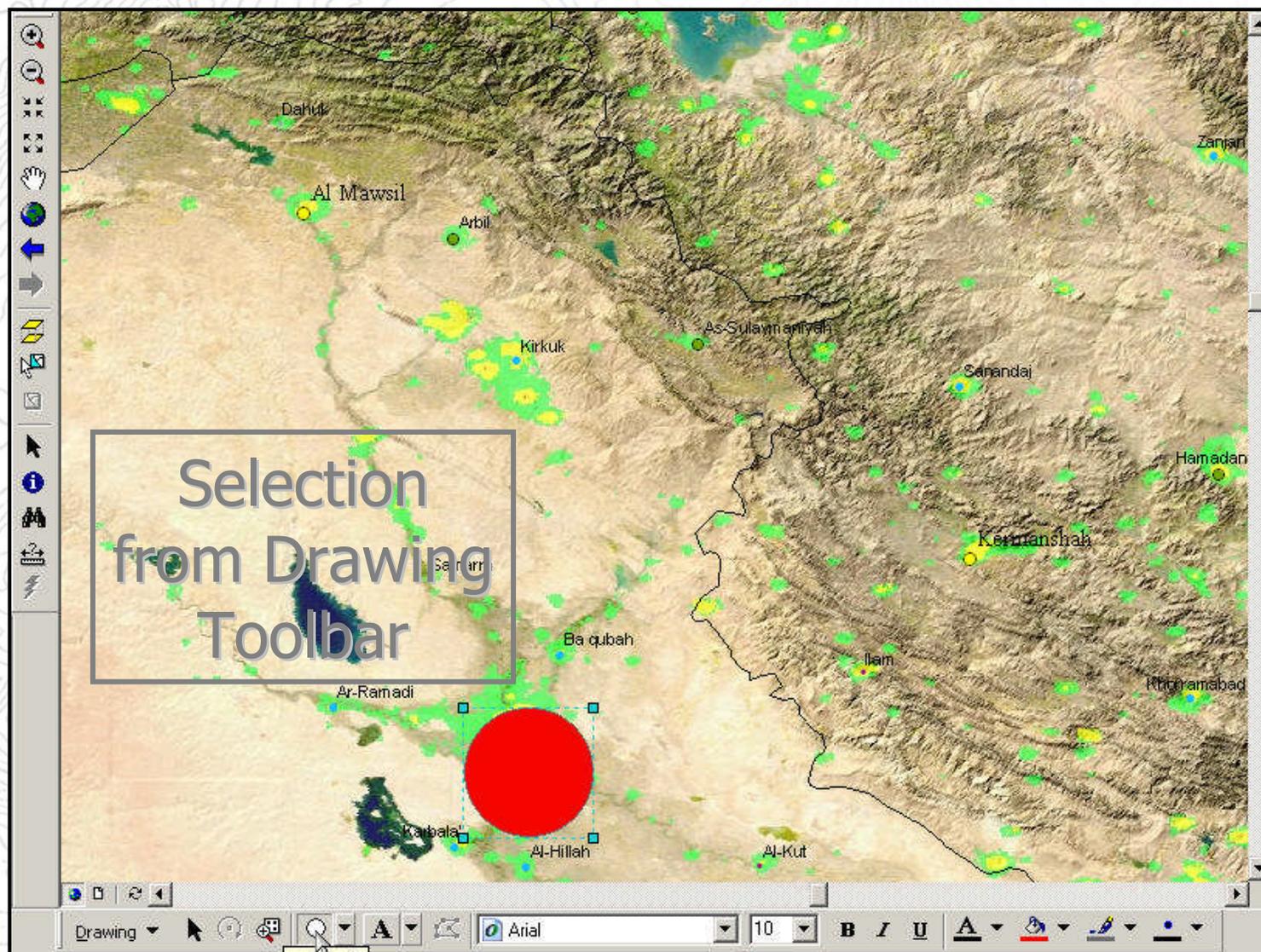
End User(s):
Russ Cowart - I-cubed
970-482-4400
201 Linden Street
Fort Collins, CO
80524

Help Cancel < Back Next > Submit



i-cubed

Multi-temporal, Multi-source





i-cubed

Filtering of Scene Selection by Date Range

DataDoors - Submit Request Wizard - Temporal Criteria

Define the criteria you want to apply to narrow the list of available scenes.

Acquire all available

Use the specified criteria

Start Date: May 01 2003

To Date: July 31 2005

Method: Linear Seasonal

Help Cancel < Back Next > Submit



i-cubed

Metadata List of Available Imagery

Indicate the scene you wish to request by checking on the appropriate request box.

Request	Name	Date	Footprint	Browse	Metadata
<input type="checkbox"/>	PO 105308 Component 000000	2003-01-25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available
<input type="checkbox"/>	PO 105309 Component 000000	2003-01-25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available
<input type="checkbox"/>	PO 105310 Component 000000	2003-01-25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available
<input type="checkbox"/>	PO 105982 Component 000000	2003-02-05	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available
<input checked="" type="checkbox"/>	PO 106002 Component 000000	2003-02-05	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	available
<input type="checkbox"/>	PO 3664 Component 0000000	2002-04-20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	available
<input type="checkbox"/>	PO 3739 Component 0000000	2002-04-20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	available
<input type="checkbox"/>	PO 72791 Component 0000000	2000-07-28	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	available
<input type="checkbox"/>	PO 72791 Component 0010000	2000-07-28	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available
<input type="checkbox"/>	PO 97407 Component 0000000	2002-03-07	<input checked="" type="checkbox"/>	<input type="checkbox"/>	available

Results: 21 Request all scenes: Show all footprints: Metadata... License...

Help Cancel < Back Next > Submit



i-cubed

Selection of Value-Added Process

Select one of the processes you wish to apply to the product.

Processes

- Deliver source data
- Mosaic
- MCCO
- ADGSAM
- Orthorectify and mosaic

Description

Deliver source data as is

Help Cancel < Back Next > Submit



i-cubed

Flex / Flash GUI

DATA DOORS™ DATA ON DEMAND™

Scale: 1:199,670,047
Latitude: 22.08
Longitude: 12.6
UTM Zone: 33
AOI Area: No AOI

Welcome, Guest!
User Name:
Password:

Select Product
1. "Locate" or use the "Map Navigation Tools" to navigate to the vicinity of your project
2. Use the "AOI Tools" to define your AOI

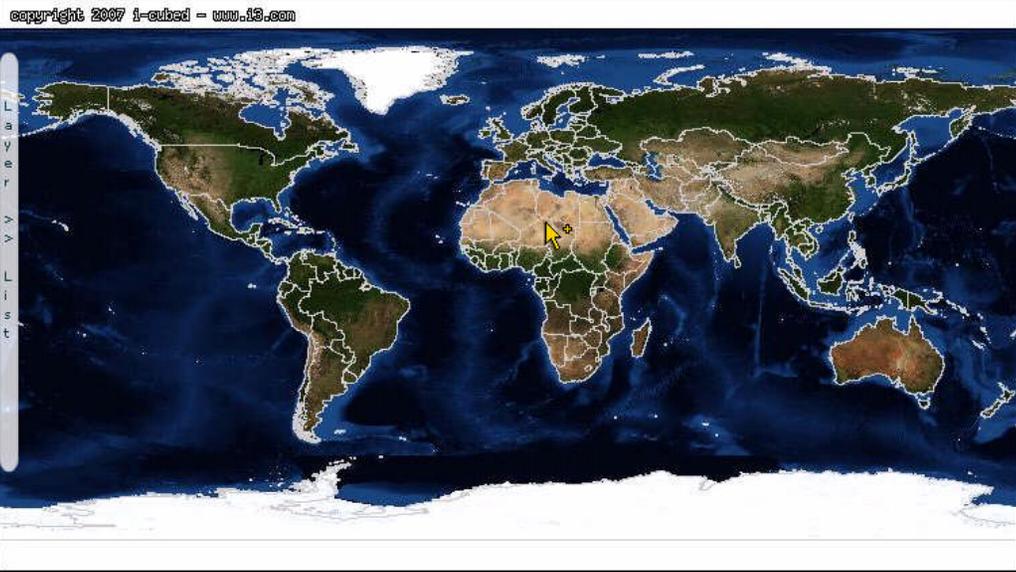
Product Details
(0) Items in Order

Product	Name/ID	Date	Footprint	Browse	Current License	Upgrade License

My Order
No products selected...

Check Out
Order Name:
Shipping Info: Choose order name first
Media: Choose shipping info first
Total Cost: Need more info

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FAS

USDA United States Department of Agriculture
Foreign Agricultural Service

Linking U.S. Agriculture 
FAS to the World

Welcome,
FAS User!

User Name:
Password:

[Log Out](#) [Help](#)

Select Product

- ▶ DigitalGlobe
- ▶ GeoEye
- ▶ i-cubed
- ▼ USDA FAS
 - ▶ GLCF Landsat ETM Multispectral
 - ▶ IRS RESOURCESAT-1 AWIFS Data

[Search](#) [Add to Order](#)

Product Details

GLCF Landsat ETM Multispectral (3) (1) Items in Order

- [Remove from Order](#)
- [Zoom To Footprint](#)
- [Show All Footprints](#)
- [Show No Footprints](#)

Name/ID	In Order	Browse	Date	Footprint	Metadata	Proc. Level	Cloud Cover	Incidence An	Snow Cover	Quality	License
Path 20 Row :	yes	(View)	2002-09-09	<input type="checkbox"/>	Not Available		-	-	-	-	None
Path 20 Row :		(View)	2001-08-21	<input type="checkbox"/>	Not Available		-	-	-	-	None

Locate



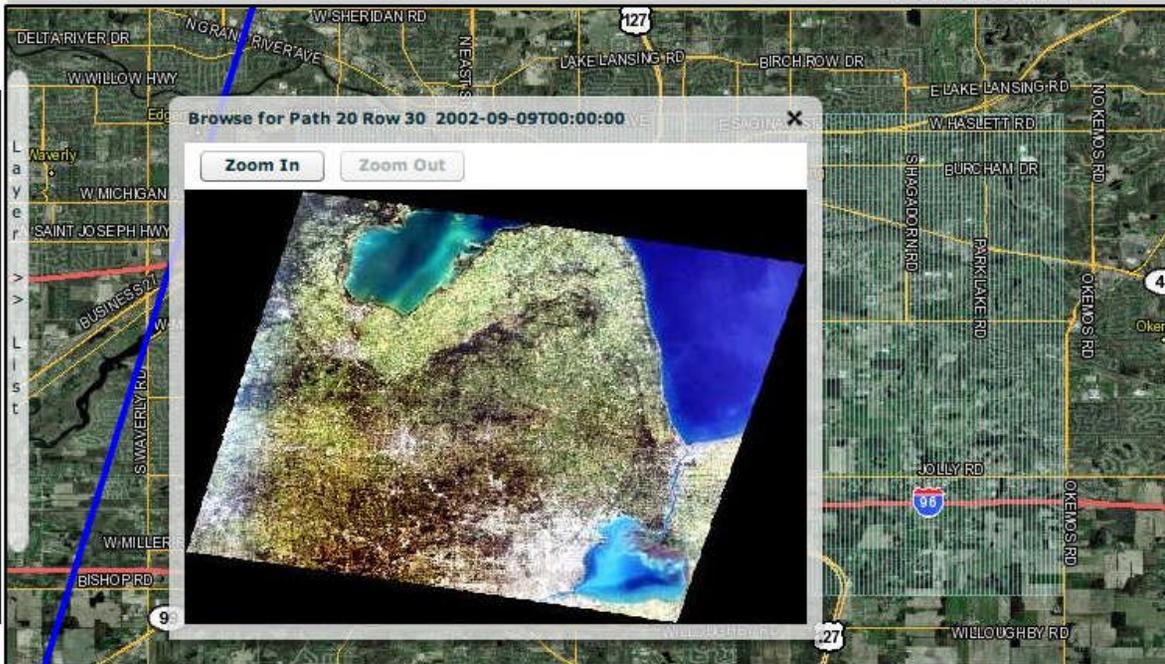
Map Navigation



Area of Interest (AOI) Tools



Scale: 1:121,334
Latitude: 42.67
Longitude: -84.57
UTM Zone: 16
AOI Area: 116 km² 45 mi²



My Order

Archive: **USDA FAS**

Product: GLCF Landsat ETM Multisped
of Items: 1
Processing: [Choose](#)
Format: Choose process first
Projection: Choose format first
Price: [\(Remove\)](#)

Check Out

[Proceed](#)



ESRI Implementation



DataDoors™ for ArcGIS 2.0 Beta

[About](#) | [Contact](#) | [Support](#) | [Tools for ArcGIS](#) | [Demos](#) | [Create Account](#)



Welcome,
Guest!

[Log In](#) [Help](#)

Locate



Map Navigation



Draw AOI (area of interest) Tools



4 My Order

No products selected...

1 Locate & Draw AOI

2 Select Product

1. "Locate" or use the "Map Navigation Tools" to navigate to the vicinity of your project
2. Use the "AOI Tools" to define your AOI
3. The visible map layers can be toggled on/off from the Layer List menu

[Search](#) [Add to Order](#)

3 Product Details

[Open Product Details Table](#)



5 Check Out

[Proceed](#)

Microsoft®
Virtual Earth™



DIGITALGLOBE





DataDoors for the Web Multi-source Procurement

DATA DOORS™ DATA ON DEMAND™

Welcome, **Russ Cowart!**

User Name:
Password:
[Log Out](#) [Instructions](#)

Select Product

- Agency_X
- ArcGIS Online
- Army TEC
- DigitalGlobe
- GeoEye
- i-cubed
- Multimedia
 - Video, Photos, Documents...
- SPOT Image Corporation

[Search](#) [Add to Order](#)

Product Details

SPOTS 2.5m Pan (1) X QuickBird 0.6-m Imagery (27) X IKONOS 0.8-m Imagery (54) X (4) Items in Order

Remove Item	Product	Name/ID	Date	Footprint	Browse	Current License	Upgrade License
Zoom To Footprint	SPOTS 2.5m Pan	K/J 622/272	2006-10-14	<input checked="" type="checkbox"/>	(View)	None	I-cubed Default Licens <input type="text"/>
Show All Footprints	Landsat-7 USA Mosaic, Eco-Regior	Not Available	Not Available	<input checked="" type="checkbox"/>	Not Available	None	I-cubed Default Licens <input type="text"/>
Show No Footprints	QuickBird 0.6-m Imagery	1010010000510C01	2002-04-16	<input checked="" type="checkbox"/>	(View)	None	I-cubed Default Licens <input type="text"/>
	IKONOS 0.8-m Imagery	2000020201002TH0	2000-02-05	<input checked="" type="checkbox"/>	(View)	None	I-cubed Default Licens <input type="text"/>

Map Navigation

Area of Interest (AOI) Tools

Scale: 1:1,208,044
Latitude: 38.34
Longitude: -76.74
UTM Zone: 18
AOI Area: 12,190.2 sq. km.

My Order

Product: QuickBird 0.6-m Imagery
of items: 1
Processing: [Choose](#)
Format: Choose format first
Projection: Choose format first
Price: Not available
[\(Remove\)](#)

Archive: GeoEye

Product: IKONOS 0.8-m Imagery
of items: 1
Processing: [Choose](#)
Format: Choose format first
Projection: Choose format first
Price: Not available
[\(Remove\)](#)

Check Out

Order Name: [Choose](#)
Shipping Info: Choose order name first
Media: Choose shipping info first
Total Cost: **Need more info**
[Proceed](#)

Internet



i-cubed

Administrative Interface Job Status

Tuesday, September 11, 2007



DATA DOORS

DATA ON DEMAND

- Home
- Log In
- Administration
- Jobs
- Archive Management
- Documents
- Downloads
- DataDoorsWeb
- Sign Out

Showing Page 9 of 192 - Jobs For I-cubed

Job Name, UID, or Owner Name: [\[Filter\]](#)

[\[Show Jobs For All Companies\]](#) [\[Show Jobs For My Archives\]](#)

[\[First Page\]](#) [\[Previous Page\]](#) [\[Next Page\]](#) [\[Last Page\]](#)

Job ID	Name	Approved	Submit Date	% Complete
8302	jd_test1	True	7/16/07 12:23 PM	100%
8294	goben	True	7/13/07 4:13 PM	100%
8289	Wash	True	7/12/07 6:29 PM	100%
8288	Arizona	True	7/12/07 6:23 PM	100%
8287	Arizona	True	7/12/07 4:21 PM	100%
8285	Wash	True	7/12/07 12:59 PM	100%
8284	Texas	True	7/12/07 12:52 PM	100%
8283	Minn	True	7/12/07 12:43 PM	100%
8281	Minnesota	True	7/12/07 10:29 AM	100%
8274	Wat	True	7/10/07 2:24 PM	100%
8271	co_riv	True	7/10/07 1:10 PM	100%
8269	co_riv	True	7/10/07 1:09 PM	100%
8268	SDT_AOI_4	True	7/10/07 11:04 AM	100%
8267	SDT_AOI_3	True	7/10/07 11:02 AM	100%
8266	SDT_AOI_2	True	7/10/07 10:56 AM	100%
8265	SPD_AOI_1	True	7/10/07 10:49 AM	100%
8263	CO_test	True	7/10/07 9:23 AM	100%
8255	sanRamon3	True	7/9/07 12:43 PM	100%
8254	SanRamon_SPCS	True	7/9/07 12:29 PM	100%
8252	sanRamon	True	7/9/07 10:02 AM	100%



i-cubed

Administrative Interface Licensing & Pricing

DATA DOORS DATA ON DEMAND

- Home
- Log In
- Administration
- Jobs
- Archive Management
- Documents
- Downloads
- DataDoorsWeb
- Sign Out

Pricing Menu

- [Product Pricing](#)
Configure pricing for products
- [Company Discounts](#)
Configure product discounts for specific companies
- [Process Pricing](#)
Configure pricing for processes
- [License Upgrades](#)
Configure percentage costs for license upgrades
- [Edit Licenses](#)
Add, edit and delete licenses.
- [Edit Licensing](#)
Assign Usable and Purchasable license to companies that view your archives
- [Edit Footprint Licenses](#)
Add and remove licensing from specific footprints
- [Search Footprints](#)
Search footprints based on name or ID
- [Media Pricing](#)
Assign costs to different media types



i-cubed

Administrative Interface Authorization & Pricing Detail

DATA ON DEMAND

- Home
- Log In
- Administration
- Jobs
- Archive Management
- Documents
- Downloads
- DataDoorsWeb
- Sign Out

[Return to Pricing Menu](#)

Product Discounts

Company	Product Discounts
101st Airborne Div AASLT	Edit...
111111_TESTJD	Edit...
150th CES/GeoBase	Edit...
1st Cavalry Division, 3rd BCT, HQ Troop 6th Squadron, 9th Cavalry	Edit...
2600 Military Intelligence Group Detachment 2	Edit...
2nd Stryker Cavalry Regiment	Edit...
3D Military Intelligence Center	Edit...
480thIG	Edit...
4D Earth	Edit...
4th IBCT, 1st Infantry Division, Fort Riley, KS	Edit...
4th Infantry Regiment, 1st BN, B Co.	Edit...
526th/518th Engineer Detachment	Edit...
7th Army Joint Multinational Training Command	Edit...
82nd Airborne Division G2, GI&S Cell	Edit...
90th Regional Readiness Cmd, 460th Chemical BDE, 468th Chemical BN	Edit...
99th Readiness Command	Edit...
A	Edit...



i-cubed

DataDoors Implementation Options

- ✓ Entire framework can exist in your network
 - ✓ No special hardware or network requirements
 - ✓ Traditional licensing or metered utilization
- ✓ Outsource data warehousing to i-cubed
 - ✓ Secure and redundant storage, processing & communication infrastructure
 - ✓ Cost-effective archive indexing and fulfillment
- ✓ Any combination
 - ✓ Modular nature of DataDoors allows processing to occur adjacent to archive hosting
 - ✓ Management and administration handled centrally